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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Takashi Nomura

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EXAMINER

EHICHIOYA, FRED I

ART UNIT

PAPER NUMBER

2156

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,629	Applicant(s) NOMURA, TAKASHI	
	Examiner FRED I. EHICHIOYA	Art Unit 2156	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 7, 9 - 10 and 14 - 19 is/are rejected.
- 7) ☒ Claim(s) 8, 11 - 13 and 20 - 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/23/08, 6/12/07, 1/31/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to communication filed September 21, 2005.
2. Claims 1 – 25 are pending.
3. Claims 1 – 7, 9 – 10 and 14 – 19 are rejected.
4. Claims 8, 11 – 13 and 20 – 25 are objected to.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 - 25 are rejected under 35 U.S.C. 101 because:

Claims 1, 9 and 14 are directed to a data product respectively. This is software per se. Claims 1, 9 and 14 are neither hardware nor a combination of hardware and software; therefore claims 1, 9 and 14 are non-statutory (MPEP 2106.01 [R-5] (I)).

Regarding claims 2 – 8, 10 – 13 and 15 - 25, these are dependent claims, recite computing steps, are merely descriptive and lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101 and therefore non-statutory.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 7, 9 – 10 and 14 – 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,951,622 issued to Takashi Nomura (Hereinafter “Nomura”).

Regarding claim 1, Nomura discloses a data product that can be read into a computer or a map data processing apparatus and contains map data that includes map-related information related to a map, the map data comprising:

a structure achieved by dividing the map into a plurality of mesh-like subdivisions and dividing the map-related information into units corresponding to the individual subdivisions (see column 4, lines 15 – 19); and

a structure in which the map-related information is managed in units of subdivision sets each containing a plurality of adjacent subdivisions and the map-related information is used in the map data processing apparatus in units of the individual subdivision sets (see column 5, lines 58 – 62).

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Regarding claim 2, Nomura discloses a data product according to claim 1, wherein:

the subdivision sets are each constituted with a core portion having at least one subdivision that does not overlap with another subdivision set and an overlap portion having at least one subdivision that is part of a core portion of another subdivision set (see column 2, lines 29 – 40).

Regarding claim 3, Nomura discloses a data product according to claim 1 or claim 2, wherein:

the map-related information corresponding to the overlap portion is generated by reducing the map-related information corresponding to the core portion of the other subdivision set (see column 5, lines 60 – 62).

Regarding claim 4, Nomura discloses a data product according to any of claims 1 through 3, wherein:

the map-related information corresponding to each of the subdivision sets is continuously recorded on a recording medium as a single block of information (see column 3, lines 63 – 67).

Regarding claim 5, Nomura discloses a data product according to any of claims 1 through 4, wherein:

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the map-related information adopts a structure that allows the map-related information to be used in the map data processing apparatus also in units of the individual subdivisions (see column 9, lines 56 – 58).

Regarding claim 6, Nomura discloses a data product according to any of claims 1 through 5, the map data further comprising:

a structure that contains management information used to manage the map-related information in units of the subdivision sets (see column 4, lines 15 – 19), wherein:

the map-related information obtained by the map data processing apparatus can be updated in units of the subdivision sets by using the management information (see column 5, lines 42 - 45).

Regarding claim 7, Nomura discloses a data product according to any of claims 1 through 6, wherein:

the map-related information is route-related information related to routes on the map used for route calculation (see column 4, lines 5 – 8).

Regarding claim 9, Nomura discloses a data product that can be read into a computer or a map data processing apparatus and contains map data that includes map-related information related to a map, the map data comprising:

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a structure achieved by dividing the map into a plurality of mesh-like subdivisions and dividing the map-related information into units corresponding to the individual subdivisions (see column 4, lines 15 – 19); and

a structure in which the map-related information is managed in units of subdivision sets each containing a plurality of adjacent subdivisions and the map-related information is used in the map data processing apparatus in units of the individual subdivision sets (see column 5, lines 58 – 62), wherein:

the subdivision sets are each constituted with a first subdivision and at least one subdivision adjacent to the first subdivision (see column 9, lines 5 – 10);

map-related information corresponding to the first subdivision comprises the map-related information having been divided (see column 1, lines 59 – 61); and

map-related information corresponding to the subdivision adjacent to the first subdivision comprises information generated by reducing the map-related information having been divided (see column 5, lines 58 – 62).

Regarding claim 10, Nomura discloses a data product according to any of claims 1 through 6 and 9, embodied as a recording medium having recorded therein the map data (see column 3, lines 63 – 67).

Regarding claim 14, Nomura discloses a data product that can be read into a computer or a map data processing apparatus and contains map data that includes map-related information related to a map, the map data comprising:

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a structure in which the map-related information is provided at a plurality of levels each corresponding to one of various scaling factors (see column 4, lines 49 – 50);

a structure achieved by dividing the map into a plurality of mesh-like subdivisions and dividing the map-related information divided into units corresponding to the individual subdivisions, at each level (see column 4, lines 15 – 19);

a structure in which the map-related information is managed in units of subdivision sets each containing a plurality of adjacent subdivisions and the map-related information is used in the map data processing apparatus in units of the individual subdivision sets (see column 5, lines 58 – 62); and

a structure in which management tables containing information used to manage the subdivision sets at the individual levels are provided (see column 4, lines 9 – 10), wherein:

the management tables contain information used in an arithmetic operation executed to determine correspondence between subdivision sets at different levels (see column 4, lines 5 – 10).

Regarding claim 15, Nomura discloses a data product according to claim 14, wherein:

the management tables each contain information indicating a position of a reference subdivision representing a given subdivision set in combination with information related to a quantity of subdivisions contained in the subdivision set along a

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vertical direction and information related to a quantity of subdivisions contained in the subdivision set along the horizontal direction (see column 7, lines 1 – 5).

Regarding claim 16, Nomura discloses a data product according to claim 15, wherein:

the subdivision set has a rectangular shape (see FIG. 21A); and

the reference subdivision representing the subdivision set is a subdivision located at a lower left position in the subdivision set (see FIG. 21B).

Regarding claim 17, Nomura discloses a data product according to claim 16, wherein:

sets of the information used to manage the subdivision sets are stored sequentially in an order corresponding to a positional arrangement of reference subdivisions representing the individual subdivision sets in reference to the horizontal direction and the vertical direction along which the map is divided (see column 5, lines 38 – 58).

Regarding claim 18, Nomura discloses a data product according to any of claims 14 through 17, wherein:

the map is divided into a plurality of mesh-like blocks at each of the levels (see column 4, lines 15 – 19);

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the plurality of subdivisions are subdivisions obtained by further dividing each of the blocks into smaller partitions (see column 5, lines 58 – 62); and

the management tables are provided each in correspondence to one of the blocks (see column 4, lines 9 – 10).

Regarding claim 19, Nomura discloses a data product according to any of claims 14 through 18, wherein:

the map-related information obtained by the map data processing apparatus can be updated in units of the individual subdivision sets by using the management tables (see column 5, lines 42 - 45).

Claim Objections

7. Claims 8 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims pending the overcoming the rejection under 35 U.S.C. 101.

Claims 11 – 13 and 21 – 25 depend from claims 8 and 20 respectively; these claims are also indicated as allowable subject matter but inherit the deficiencies of claims 8 and 20 respectively.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED I. EHICHIOYA whose telephone number is (571)272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre M. Vital can be reached on 571-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred I. Ehichioya/
Primary Examiner, Art Unit 2156

December 31, 2009